

What Is Claimed Is:

1. A method for operating a metering unit of a catalytic converter of a combustion system, the method comprising:
 - metering a quantity of at least one reagent into an exhaust gas;
 - determining a steady-state value of the reagent to be metered based on an assumed steady-state operating state of at least one of the catalytic converter and the combustion system; and
 - adjusting the steady-state reagent value using at least one dynamic correction factor for a dynamic adjustment.
2. The method according to claim 1, wherein the metering unit is of an SCR catalytic converter of an internal combustion engine of a motor vehicle.
3. The method according to claim 1, wherein the at least one reagent includes a reduction agent.
4. The method according to claim 1, wherein the dynamic correction factor is determined as a function of at least one performance characteristic of the catalytic converter and of at least one performance characteristic of the combustion system.
5. The method according to claim 1, wherein at least one of the following performance characteristics of the catalytic converter is used for the adjustment of the steady-state reagent value:
 - a) a nitrogen oxide emission value upstream from the catalytic converter, and
 - b) an exhaust gas temperature value downstream from the catalytic converter.
6. The method according to claim 1, wherein the dynamic correction factor is determined based on a steady-state value for an exhaust gas temperature downstream from the catalytic converter and on a difference between the steady-

state exhaust gas temperature value and an exhaust gas temperature value.

7. The method according to claim 1, wherein the steady-state reagent value is adjusted using a nitrogen oxide correction factor.

8. The method according to claim 7, further comprising determining the nitrogen oxide correction factor by comparing a nitrogen oxide emission value with a corresponding steady-state value of a nitrogen oxide emission.

9. The method according to claim 8, wherein the nitrogen oxide correction factor as a quotient is computed from the nitrogen oxide emission value divided by the steady-state nitrogen oxide value.

10. The method according to claim 8, further comprising supplying at least one of the nitrogen oxide emission value and the steady-state nitrogen oxide value to at least one filter.

11. The method according to claim 1, wherein, as a function of at least one performance characteristic of the combustion system, steady-state values are each obtained from a steady-state characteristics map which was recorded during an assumed steady-state operating state of at least one of the catalytic converter and the combustion system.

12. The method according to claim 1, further comprising multiplying the steady-state reagent value by the at least one correction factor.

13. The method according to claim 5, further comprising determining the nitrogen oxide emission value using at least one of the following methods:

- a) from a signal of a nitrogen oxide sensor, and
- b) by simulation from at least one of engine data, measured values, and characteristics maps via computation of at least one of differential equations and functionals.

14. The method according to claim 1, wherein the steady-state reagent value is adjusted using at least one of the following variables:
- a) a value for an operation period of the catalytic converter,
 - b) a value for an operation period of the combustion system,
 - c) a value for an ambient temperature,
 - d) a coolant temperature value of the combustion system, and
 - e) a value for an air moisture.
15. The method according to claim 2, further comprising determining at least one of a value for an engine speed and a value for an injected fuel quantity as at least one performance characteristic of the internal combustion engine.
16. The method according to claim 1, further comprising obtaining each of the at least one correction factor from a characteristics map.
17. A device for operating a metering unit of a catalytic converter of a combustion system, comprising:
- a control unit for controlling a quantity of at least one reagent to be metered into an exhaust gas;
 - at least one means for determining a steady-state value of the reagent to be metered based on an assumed steady-state operating state of at least one of the catalytic converter and the combustion system; and
 - at least one correction means for adjusting the steady-state reagent value using at least one dynamic correction factor for a dynamic adjustment.
18. The device according to claim 17, wherein the metering unit is of an SCR catalytic converter of an internal combustion engine of a motor vehicle.
19. The device according to claim 17, wherein the at least one reagent includes a reduction agent.

20. The device according to claim 17, further comprising detection means for detecting at least one performance characteristic of the catalytic converter and at least one performance characteristic of the combustion system which characterize a current operating state of at least one of the combustion system and the catalytic converter.

21. The device according to claim 17, wherein the control unit stores at least one steady-state reagent characteristics map as a means for determining the steady-state reagent value and at least one of a dynamic correction characteristics map and a nitrogen oxide characteristics map for determining at least one correction factor.

22. The device according to claim 17, further comprising at least one of a nitrogen oxide sensor and a simulation unit for determining a nitrogen oxide emission value from at least one of engine data, measured values and characteristics maps via computation.